

## REMARKS

### *Claim Amendments*

Claims 194, 198, 200-206, 209, 211-218, 221, 225-226, 239-240, 242-243 and 252 are amended herein. Claims 199, 207-208 and 210 has been canceled. New claims 257-309 have been added. Accordingly, upon entry of the amendments, claims 194-198, 200-206, 209 and 211-309 are pending.

Support for these amendments can be found throughout the application as filed. No new matter has been added.

### *Oath*

This application has been accorded Rule 1.47(a) status. *See* Decision According Status under 37 CFR 1.47(a), filed with Applicants Submission of Missing Parts in Application on October 12, 2004. As such, Applicants have shown that the non-signing inventor has refused to join in the filing of the above-identified application.

### *Drawings*

Figures 1-16 are objected. *See* Notice of Draftsperson's Patent Drawing Review for drawings filed on December 3, 2003. Applicants submitted formal drawings on October 12, 2004. As such, Applicants request withdrawal of the drawing objections.

### *Specification*

The specification has been amended to update the status of applications and include a reference to Figures 16A and B. Applicants respectfully note a reference for Figure 3C is found in the last sentence of paragraph [0040]. Accordingly, Applicants request withdrawal of the objections to the specification.

### ***Claim Objections***

Claims 205, 206, 208, 221,<sup>1</sup> 242 and 252 are objected.

Claim 205 and 206 has been amended to recite “nucleic.” Claim 208 has been canceled. Claim 221 has been amended to improve the syntax as suggested in the Office Action. Claim 242 has been amended to recite “wherein said method” and to add a hyphen to “high-throughput.” Claim 252 has been amended to hyphenate “ligand-specific.” Applicants appreciate the helpful suggestions in the Office Action.

### ***Claim Rejections - 35 U.S.C. §112, First Paragraph***

Claims 194-256 stand rejected on written description and scope of enablement grounds because they allegedly encompass methods of screening all umami taste receptors, including those which hybridize to SEQ ID NOS: 9 or 10, those which are at least 90% identical to SEQ ID NOS: 8 or 9, fragments thereof, or those which are at least 90% identical to SEQ ID NOS: 5 and 7.

As amended, the claims recite methods of identifying a compound that potentially modulates T1R1/T1R3 (umami) receptor-associated taste, wherein said T1R1 and T1R3 are polypeptides encoded by specific SEQ ID NOS, encoded by nucleic acid sequences that hybridize to specific SEQ ID NOS under stringent hybridization conditions, or are amino acid sequences having at least 95% sequence identity to specific SEQ ID NOS. The claims have also been amended to delete the recitation of fragments.

Claims 194-256 also stand rejected on enablement grounds because, the specification, while being enabling for methods of screening for compounds which modulate SEQ ID NOS: 4, 5 and 7, does not reasonably provide enablement for methods of screening for compounds which “activate” the SEQ ID NO: 5/7 dimer.

As amended, the claims relate to screening and identifying compounds that modulate the activity of the T1R1/T1R3 receptor. Methods of screening and identifying compounds that

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<sup>1</sup> In the objection to claim 221, the Office Action states that “the same reasoning is used for claims 223.” This appears to be a typographical error. Applicants respectfully request clarification as to whether claim 223 is also objected.

modulate the activity of this G-protein coupled receptor may be performed using well known techniques detailed in the specification and dependent claims. *See e.g.*, paragraphs [0197]-[0238] of the specification. Applicants submit that one skill in the art, given the teachings of the specification, would be able to perform the claimed methods and determine whether a compound modulates the activity of the T1R1/T1R3 receptor. Applicants also note that claims similar to the claims specifically identified in Office Action have been allowed in U.S. Patent No. 6,955,887.

Claim 253 is further rejected on enablement grounds. As discussed above, methods of screening and identifying compounds that modulate the activity of T1R1/T1R3 may be performed using well known techniques such as measuring transmitter or hormone release. Applicants submit that one skill in the art, given the teachings of the specification, would be able to perform the claimed methods and determine whether a compound modulates the activity of the T1R1/T1R3 receptor.

In light of these amendments, Applicants respectfully request withdrawal of the written description and enablement rejections.

***Claim Rejections - 35 U.S.C. §112, Second Paragraph***

Claims 194-256 are rejected over the phrase “activation.” Applicants have amended the claims to delete “activation.”

Claims 198-206 and 208-218 are rejected over the phrase “contained in.” Applicants have amended the claims to change “contained in” to “of.”

Claim 216 is rejected because it recites the incorrect SEQ ID NO:.. Applicants have amended this claim to recite “SEQ ID NO: 4.”

Claims 206 and 218 are rejected over the phrase “stringency conditions” and “associated with.” Applicants have amended the claims to recite exact hybridization conditions as suggested in the Office Action.

Claims 207, 208 and 218 are rejected over the phrase “in association with.” Applicants have canceled claims 207-208 and amended claim 218 to delete “in association with.”

***Provisional Obviousness-Type Double Patenting***

The Office Action provisionally rejected claims 194-256 under the judicially created doctrine of obviousness-type double patenting over claims 194-229 of co-pending Application No. 10/725,080, claims 194-252 of co-pending Application No. 10/725,418, and claims 194-234 of co-pending Application No. 10/725,489.

Applicants respectfully request this rejection be held in abeyance until this application is condition for allowance.

### CONCLUSION

It is believed that these amendments and remarks should place this application in condition for allowance. A notice to that effect is respectfully solicited. If the Examiner has any questions relating to this response or the application in general he is respectfully requested to contact the undersigned so that prosecution of this application may be expedited.

It is believed that no fees are required for entry of this response, but should any fees be necessary, the Commissioner is authorized to charge such fees to the undersigned's **Deposit Account No. 50-0206**.

Respectfully submitted,

**HUNTON & WILLIAMS, LLP**

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By:



Robin L. Teskin  
Registration No. 35,030

Alexander H. Spiegler  
Registration No. 56,625

HUNTON & WILLIAMS LLP  
Intellectual Property Department  
1900 K Street, N.W. Suite 1200  
Washington, DC 20006-1109  
(202) 955-1500 (telephone)  
(202) 778-2201 (facsimile)

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